

## REMARKS

Claims 19, 20, 23, 24, and 37-62 are currently pending in the application.

Claims 1-18, 21, 22, and 25-36 have been cancelled without prejudice or disclaimer solely to comply with the restriction requirement for the application and to expedite patent prosecution in accordance with the U.S. Patent Office Business Goals (65 Fed. Reg. 54604 (September 8, 2000)). Applicants reserve the right to present the cancelled claims in a co-pending application.

Claims 19, 20, 23, and 24 have been amended for clarity and to correct minor typographical errors. Applicants reserve the right to present any cancelled subject matter in a co-pending application.

Claim 19 has been amended to recite “A method for increasing levels of biologically active NO in isolated red blood cells, comprising contacting the isolated red blood cells with a composition comprising an S-nitrosothiol.” (See, *inter alia*, page 5, lines 1-5; page 6, lines 1-7; page 30, lines 27-28; and page 31, lines 1-2 and 23-27 of the originally filed application).

Claim 20 has been amended to include a comma preceding the term “wherein.”

Claim 23 has been amended to recite “A method for increasing NO:hemoglobin values in isolated blood, said method comprising contacting the blood with a composition comprising an S-nitrosothiol.” (See, *inter alia*, page 5, lines 6-9; and page 6, lines 2-5 and 16-21 of the originally filed application).

Claim 24 has been amended to recite “A method for loading red blood cells with a nitrosothiol comprising contacting isolated blood with a composition comprising an S-nitrosothiol.” (See, *inter alia*, page 3, lines 15-19; page 6, lines 6-7; page 17, lines 12-14; page 32, lines 9-11; and Examples 22 and 23; of the originally filed application).

New Claims 37-62 have been added to more fully encompass Applicants’ invention.

New Claims 37, 46, and 55 recite "...wherein the S-nitrosothiol is S-nitrosocysteine." (See, *inter alia*, page 28, lines 10-13 and Examples 6, 19, and 23 of the originally filed application).

New Claims 38, 47, and 56 recite "...wherein the S-nitrosothiol is S-nitrosohomocysteine." (See, *inter alia*, page 17, lines 22-27 and page 28, lines 10-13 of the originally filed application).

New Claims 39, 48, and 57 recite "...wherein the S-nitrosothiol is S-nitrosocysteinylglycine." (See, *inter alia*, page 17, lines 22-27 and page 28, lines 10-13 of the originally filed application).

New Claims 40, 49, and 58 recite "...wherein the S-nitrosothiol is S-nitroso-N-acetylpenicillamine or S-nitroso-N-acetylcysteine." (See, *inter alia*, page 17, lines 22-27 and page 28, lines 10-13 of the originally filed application).

New Claims 41, 50, and 59 recite "...wherein the S-nitrosothiol includes an ester group." (See, *inter alia*, page 28, lines 10-13; page 30, lines 27-28; page 31, lines 1-2; and Example 22 of the originally filed application).

New Claims 42, 51, and 60 recite "...wherein the S-nitrosothiol is S-nitrosocysteine ethyl ester." (See, *inter alia*, page 28, lines 10-13; page 30, lines 27-28; page 31, lines 1-2; and Example 22 of the originally filed application).

New Claim 43 recites "A method for increasing biologically active NO in isolated red blood cells, comprising contacting the isolated red blood cells with a composition comprising nitric oxide." (See, *inter alia*, page 5, lines 1-5; page 31, lines 2-8 and 23-27; and Example 18 of the originally filed application).

New Claim 44 recites "A method for increasing biologically active NO in isolated red blood cells, comprising contacting the isolated red blood cells with a composition comprising ethyl nitrite." (See, *inter alia*, page 5, lines 1-5 and page 31, lines 5-8 of the originally filed application).

New Claims 45 and 54 recite "...wherein the S-nitrosothiol is S-nitrosoglutathione." (See, *inter alia*, page 5, lines 1-9; page 6, lines 1-7; and page 28, lines 10-13 of the originally filed application).

New Claim 52 recites "A method for increasing NO:hemoglobin values in isolated blood, said method comprising contacting the blood with a composition comprising nitric oxide." (See, *inter alia*, page 5, lines 6-9, page 6, lines 1-7, and Example 18 of the originally filed application).

New Claim 53 recites "A method for increasing NO:hemoglobin values in isolated blood, said method comprising contacting the blood with a composition comprising ethyl nitrite." (See, *inter alia*, page 5, lines 6-9, page 6, lines 1-7, and page 31, lines 5-8 of the originally filed application).

New Claim 61 recites "A method for loading red blood cells with a nitrosothiol comprising contacting isolated blood with composition comprising nitric oxide." (See, *inter alia*, page 3, lines 15-19, page 17, lines 12-14 and 22-24, and Example 18 of the originally filed application).

New Claim 62 recites "A method for loading red blood cells with a nitrosothiol comprising contacting isolated blood with composition comprising ethyl nitrite." (See, *inter alia*, page 3, lines 15-19, page 17, lines 12-14 and 22-24, and page 31, lines 5-8 of the originally filed application).

The amendments and newly added claims are supported by the application as originally filed, and do not constitute new matter. Specific support is shown in parentheses, above. Entry of the amendments and newly added claims is respectfully requested.

#### **Restriction Requirement**

The Office Action dated February 24, 2004 included a restriction/election requirement sets forth as follows:

Group I: Claims 1-9, 26-36 drawn to a method of treating a disease, classified in class 424, subclass 718.

Group II: Claims 10-18, drawn to a method of treating a disease, classified in class 424, subclass 93.73.

Group III: Claims 19-20, 23, 24, drawn to a method of increasing biologically active NO in isolated red blood cells or blood for transfusion, classified in class 424, subclass 718.

Group IV: Claims 21-22 drawn to a method of potentiating NO-mediated bioactivity of red blood cells, classified in class 514, subclass 665.

Group V: Claims 25, drawn to a method of identifying a human candidate for a condition associated with a low NO:Hb ratio in red blood cells, classified in class 436, subclass 63.

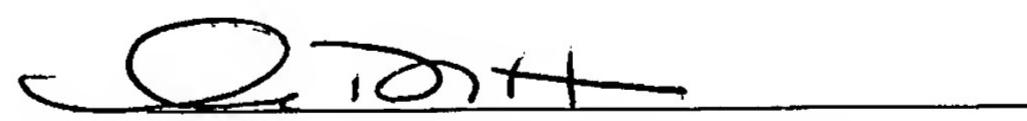
In response to the restriction/election requirement, Applicants elect Group III for further prosecution, including currently amended claims 19, 20, 23, 24, and newly added claims 37-62 (see above).

### **CONCLUSION**

If further discussion of this case is deemed helpful, the Examiner is encouraged to contact the undersigned at the telephone number provided below, and is assured of full cooperation in progressing the instant claims to allowance. While Applicant believes that no additional fees are required, the Commissioner is authorized to charge any additional fees that may be due, or to credit any overpayment, to the undersigned's account, Deposit Account No. 50-0311, Reference No. 28195-517 CIP2 (Customer Number: 35437).

Respectfully submitted,

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